In re Application of Min-ju Kim
Application No. 10/716,009
Response to Final Office Action of June 27, 2007

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-14 remain pending.

The Examiner has made minor formal objections to claims 1, 2, 5 and 10. These claims are amended as indicated above to correct the minor informalities.

Claims 1-2 and 4-9 remain rejected under 35 U.S.C. §103 (a) as obvious over Stephany et al. (U.S. Patent Application Publication No. 2002/0171746) and further in view of Shigemori (U.S. Patent No. 6,907,136). Claims 3 and 10 are rejected under 35 U.S.C. §103(a) as obvious over Stephany et al. and further in view of Shigemori and Yang et al. (U.S. Patent No. 5,923,380). Claim 11 is rejected under U.S.C. §103(a) as obvious over Stephany et al. and further in view of Shigemori and Bollman et al. (U.S. Patent No. 5,978,519). Claim 12 is rejected under U.S.C. §103(a) as obvious over Stephany et al. and further in view of Shigemori and Kage (U.S. Patent Application Publication No. 2002/0070945). Claim 13 is rejected under U.S.C. §103(a) as obvious over Stephany et al. and further in view of Shigemori, Yang and Bollman et al. Claim 14 is rejected under U.S.C. §103(a) as obvious over Stephany et al. and further in view of Shigemori, Yang and Kage.

These rejections are respectfully traversed.

The 35 U.S.C. § 103(a) Rejection of Claims 1, 2 and 4-9

As discussed in the Remarks of the previous Amendment, Applicant respectfully maintains that, as admitted by the Examiner, the Stephany reference fails to teach or suggest a method for capturing images that includes the steps of displaying a "detection area" adjacent to a reference outline, and detecting the outline of a figure within the detection area. On page 2 of the Final Office Action, the Examiner contends that Figure 3 and column 3, lines 1-10 of Shigemori teach a "detection area." However, Applicant respectfully submits that Figure 6 of Shigemori and its related description fail to teach or suggest a *detection area*. Rather, Shigemori teaches displaying a rectangular mark that can be used to cut out a square image containing the face of an image of a person. Again, this rectangular mark is not used to *detect* the outline of a figure, but rather, is manually sized appropriately about the face of an existing image to cut out a smaller image containing the face. No "detection" is performed using the rectangular mark.

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In addition, in the rejection of claims 3 and 10 which is discussed in more detail below, the Examiner contends that Figures 5 and column 3, lines 21-60 teach deleting the background area of the image with respect to the "detected outline." Applicant respectfully submits, however, that according to these teachings of Shigemori, a face area is extracted from a whole body area. In other words, Shigemori does not teach or suggest deleting the background area with respect to a detection area, since no detection area is present in Shigemori.

Accordingly, the Shigemori reference does not make up for the deficiencies in the teachings of the Stephany reference. Hence, all claims should be allowable over these references.

The 35 U.S.C. § 103(a) Rejection of Claim 11

In this rejection, the Examiner admits that Stephany and Shigemori fail to teach or suggest detecting the outline of the figure based on pixels having a relatively greater gradation difference among pixels in the detection area. Nevertheless, for this feature, the Examiner relies on the teachings of Bollman and contends that one skilled in the art would have found it obvious to further modify the teachings of Stephany and Shigemori in accordance with the teachings of Bollman to achieve the embodiment of the present invention as recited in dependent claim 11. Applicant respectfully disagrees.

Bollman teaches an automatic image cropping device in which an image of an object of interest can be identified in a larger image by detecting regions having a considerable variance in intensity levels. However, Bollman fails to teach or suggest displaying a detection area. Hence, Bollman does not make up for the deficiencies in the teachings of the Stephany and Shigemori references to have rendered even the embodiment of the invention as defined in independent claim 1 obvious. Accordingly, all claims should be allowable over these references.

The 35 U.S.C. § 103(a) Rejection of Claim 12

In this rejection, the Examiner admits that Stephany and Shigemori fail to teach or suggest a detection area that encompasses the reference outline. Nevertheless, for this feature, the Examiner relies on the teachings of Kage and contends that one skilled in the art

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would have found it obvious to further modify the teachings of Stephany and Shigemori in accordance with the teachings of Kage to achieve the embodiment of the present invention as recited in dependent claim 12. Applicant respectfully disagrees.

Kage teaches a method and device for generating a person's portrait. The Examiner contends that rectangle 8 shown in Fig. 2J is a "reference outline." However, Kage fails to teach or suggest displaying a detection area. Hence, Kage does not make up for the deficiencies in the teachings of the Stephany and Shigemori references to have rendered even the embodiment of the invention as defined in independent claim 1 obvious. Accordingly, all claims should be allowable over these references.

The 35 U.S.C. § 103(a) Rejection of Claims 3 and 10

In this rejection, the Examiner again relies on the Stephany and Shigemori references for reasons similar to those with regard to the rejection of claim 1. However, the Examiner admits that these references fail to teach or suggest inserting a background image in the deleted background area. Nevertheless, for this feature, the Examiner relies on the teachings of the Yang reference, and contends that one skilled in the art would have found it obvious to further modify the Stephany camera, as modified by the teachings of the Shigemori reference, to achieve the embodiments of the present invention as defined in claims 3 and 10. Applicant respectfully disagrees.

As discussed in the Remarks of the previous Amendment, the Yang reference does not teach or suggest the use of a reference outline and detection area as claimed. In particular, the Yang reference does not teach or suggest the use of a detection area to *detect* the outline of a figure within the detection area.

In addition, as discussed above with regard to the rejection of claims 1, 2 and 4-9, the Examiner contends that Figures 5 and column 3, lines 21-60 teach deleting the background area of the image with respect to the "detected outline." Applicant respectfully submits, however, that according to these teachings of Shigemori, a face area is extracted from a whole body area. In other words, Shigemori does not teach or suggest deleting the background area with respect to a detection area, since no detection area is present in Shigemori.

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For all these reasons, the Yang reference does not make up for the deficiencies in the teachings of the Stephany and Shigemori references to have rendered even the embodiments of the invention as defined in independent claims 1 and 10 obvious. Hence, all claims should be allowable.

The 35 U.S.C. § 103(a) Rejections of Claims 13 and 14

These rejections are similar to those presented against claims 11 and 12, respectively, except that the Examiner also relies on the teachings of Yang, presumably because claims 13 and 14 depend from claim 10, and Yang is relied upon in rejecting claim 10. Applicant respectfully submits that for reasons similar to those discussed above, the teachings of Yang, Bollman and Kage fail to make up for the deficiencies in the teachings of Stephany and Shigemori to have rendered the embodiments of the present invention even as defined in independent claims 1 and 10 obvious. Hence, all claims should be allowable.

In view of the above, the application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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Date: August 27, 2007

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CERTIFICATE OF MAILING

I hereby certify that this RESPONSE TO FINAL OFFICE ACTION OF JUNE 27, 2007 (along with any documents referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Date: <u>August 27, 2007</u>

Irina L. Mikitiouk